

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No. : 09/920,583 Confirmation No. 5991  
Applicant : L. Jeffrey Kapner III et al.  
Filed : July 31, 2001  
TC/A.U. : 2623  
Examiner : Sumaiya A. Chowdhury  
  
Docket No. : A0795  
Customer No. : 8791

Commissioner for Patents  
PO Box 1450  
Alexandria VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131

Dear Sir:

We, L. Jeffrey Kapner III and George Hefner hereby declare that:

1. We are the inventors of the subject matter claimed in the above-identified patent application, which is assigned to Western Digital Technologies, Inc.
2. This declaration is to establish conception of the invention in the above-identified patent application in the United States, at a date prior to June 19, 2001, the filing date of Provisional Application No. 60/299,532, which was cited by the Examiner in the Office Action dated June 8, 2007.
3. We understand that the invention relates to the following:

A. A client terminal connectable to a video distribution system and a display device, the video distribution system provides program guide information to create a program guide that includes program guide entries for subscribed channels and non-subscribed channels, the client terminal comprising:

a video distribution system interface to receive the program guide information;  
a display interface to display the program guide on the display device;  
a user interface to receive user input; and  
a terminal controller responsive to a subscription control program for:

- a. in response to user input, selecting a program guide entry from the program guide; and
- b. upon selection of a program guide entry that is for a non-subscribed channel,
  - i. recommending at least one bundle of channels for subscription by the user based upon a subscription matrix for the user that is stored locally

- at the client terminal, the currently selected program guide entry for the non-subscribed channel displayed in the program guide, and available bundles of channels for subscription, wherein the subscription matrix includes channels subscribed to by the client terminal and available channels not subscribed to by the client terminal;
- ii. accepting user input to select a bundle of channels for subscription by the user; and
- iii. transmitting a subscription request for the selected bundle of channels to the video distribution system.

**B.** A computer program embodied in a computer readable storage medium for use in a client terminal connectable to a video distribution system and a display device, the video distribution system provides program guide information to create a program guide that includes program guide entries for subscribed channels and non-subscribed channels, the computer program comprising code segments for:

- a. in response to user input, selecting a program guide entry from the program guide; and
- b. upon selection of a program guide entry that is for a non-subscribed channel,
  - i. recommending at least one bundle of channels for subscription by the user based upon a subscription matrix for the user that is stored locally at the client terminal, the currently selected program guide entry for the non-subscribed channel displayed in the program guide, and available bundles of channels for subscription, wherein the subscription matrix includes channels subscribed to by the client terminal and available channels not subscribed to by the client terminal;
  - ii. accepting user input to select a bundle of channels for subscription by the user; and
  - iii. transmitting a subscription request for the selected bundle of channels to the video distribution system.

**C.** A method for selecting a bundle of channels utilizing a program guide, the program guide including program guide entries for subscribed channels and non-subscribed channels, the method comprising the steps of:

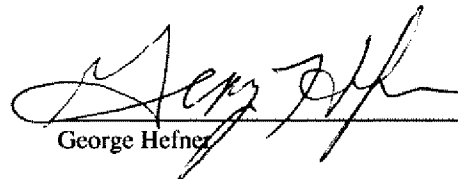
- a. in response to user input received at a client terminal, selecting a program guide entry from the program guide;
- b. upon selection of a program guide entry that is for a non-subscribed channel,
  - 1. performing processing at the client terminal to recommend at least one bundle of channels for subscription by the user based upon a subscription matrix for the user that is stored locally at the client terminal, the currently selected program guide entry for the non-subscribed channel displayed in the program guide, and available bundles of channels for subscription, wherein the subscription matrix includes channels subscribed to by the client terminal and available channels not subscribed to by the client terminal;
  - 2. accepting user input to select a bundle of channels for subscription by the user; and

3. transmitting a subscription request for the selected bundle of channels from the client terminal to a video distribution system.
4. Prior to June 19, 2001, we completed an Invention Disclosure (Exhibit A) describing the invention and submitted the Invention Disclosure to the legal department of Western Digital Technologies, Inc.
5. After receipt and review of the Invention Disclosure, the legal department of Western Digital Technologies, Inc. decided to proceed with the preparation of a patent application and requested that Blakely, Sokoloff, Taylor & Zafman LLP prepare and file a patent application on the subject matter set forth in Exhibit A.
6. Thereafter, the above-identified patent application was prepared with due diligence and filed on July 31, 2001.

I hereby declare that all statements made herein of my own knowledge are true and that the statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 9/7/07

Date: \_\_\_\_\_

  
George Hefner

\_\_\_\_\_  
L. Jeffrey Kapner III

# **EXHIBIT A**

COPY

Reference: A0795

BUSINESS PRACTICE FOR AUTOMATIC PREMIUM SERVICE SUBSCRIPTION  
VIA PROGRAM GUIDE SELECTION

Abstract of the Disclosure

Cable Television systems carry Premium TV services, which are also known as conditional access programs. These programs are delivered to the cable subscriber's home via the cable infrastructure. Typically the cable billing system manages the viewing permissions (also known as the level of service). The billing system speaks to the set top box management system. This set top box management system is typically located in the cable system head end. Every 24 hours the set top box management system communicates with the subscriber's set top box or boxes to reiterate and communicate the subscriber's account status. If a subscriber calls in and changes their service level a CSR may force an immediate change to the level of service received by sending a command through the system. Typically all Premium channels are scrambled on a cable system because they are additive services, which require an additional monthly service fee. Example: Cable service is \$30 per month; a subscriber can add a premium service (HBO, Cinemax, Showtime, The Movie Channel, Starz or Encore) for an additional monthly fee of approximately \$10. In some cases the premium services are bundled together for a discounted monthly fee.

Keen PM proposes a new way to order via a "Quick Click" process. This process allows the subscriber to order premium service automatically from the Electronic Preview Guide (EPG) or Interactive Program Guide (IPG). Here is a description of the process.

A cable subscriber would turn on their TV and Cable Service. More specifically, any device that is capable of delivering conditional access programming. This would include any decoder or de-scrambling technology for video (or audio), including wireless (satellite, C band or KU band) delivery or terrestrial (Cable, DSL, etc) to the subscriber.

The subscriber to the standard level of service would be able to review the programming listings (this could be a guide, either EPG or IPG). Upon reviewing the listings a subscriber could choose to order a premium service. If the subscriber has no premium services on their account the system would query for permission to grant access. If the subscriber already has one or more premium services, our system would query the billing system for permission and then bundle the subscriber in the most cost efficient package available that included their service request.

An explanation of how this is done is included below.

The subscriber would use their remote control or their "command device"<sup>1</sup> to click on the program or premium channel they want to see. When the subscriber highlights the program, the system initiates a query asking the subscriber to confirm their request.

---

<sup>1</sup> A command device is any type of electronic device that sends the command to the system, making a request for authorization; this could be a remote control, a keyboard and mouse, a PDA, a cell phone or a computer.

Once the subscriber confirms the request the system performs the following steps:  
The system will **Validate Unique User Request** – meaning the application will check that the subscriber has not made a duplicate request or does not have an existing subscription. If the request duplicates an existing service, the user will be informed and no further action will be taken. Then the system will **Authentication of the User Request** – when a new request is made, our application will query the viewer to authenticate the request. If the request is canceled the commands are interrupted. Upon confirmation a valid request, code with the application permissions will be sent to the billing system and to the device after Verification of Credit has been determined. Then the application performs a **Verification of User Credit** – the application will check with the credit/billing system to verify that the subscriber can purchase or add the requested service. If the request is denied, the user is informed and no further action will be taken. Then the application can **Authorize Access** – once all the Validation, Authentication and Verification steps have been completed successfully, the communication with the Billing System and the device management system to authorize the purchase and communicate a purchase and provide access to the device. Also performed is **Conflict Resolution** – the application will catch conflicts and present the viewer with an instantaneous conflict notification. The viewer is informed and allowed to resolve the conflict.

An additional element to this service is the ability for a subscriber to **Validate and Authorize Remote Access Program requests** – when the viewer makes request via the Remote Access Program the application will perform the required steps to validate authorize (or deny) they request.

Once these steps have been completed the subscriber will see the conditional access channel or programming. The established monthly (or standard fee) will be assessed on the subscriber's bill or the chosen method of delivering billing.

Also important to this process are the access rights to single premium channels, multiplexes of channels and bundling of premium services. The Premium Pay TV Promotion and the Premium Pay TV Bundling can be ordered via the KPM "Quick Order" process, which will allow the viewer to place an immediate order of any desired Pay TV service or multiplexed bundle of services. The cable system will be able to match the orders process to any special promotion, important program or event, and drive viewer ship and impulse purchases, all with a simple convenient click of the remote.

